Serial No. Not Yet Assigned Atty. Doc. No. 2002P051

Amendments To The Specification:

In the English translation document, please delete the term --Description-- at page 1 line 1, before the title.

In the English translation document, please add the paragraph at page 1 line 5, after the title, as follows:

-- CROSS REFERENCE TO RELATED APPLICATIONS

This application is the US National Stage of International Application No. PCT/DE03/00895, filed March 18, 2003 and claims the benefit thereof. The International Application claims the benefits of German application No. 10213862.1 filed March 27, 2002, both of the applications are incorporated by reference herein in their entirety.--

In the English translation document, please add the section heading at page 1 line 5, after the newly added CROSS REFERENCE TO RELATED APPLICATIONS section, as follows:

--FIELD OF INVENTION--

In the English translation document, please amend the paragraph at page 1 lines 6-8, as follows:

The invention relates to an AAA (Authentification, Authorization, Accounting) server system and a method for the administration of a pool of logical addresses.

In the English translation document, please add the section heading at page 1 line 9, as follows:

--BACKGROUND OF INVENTION--

In the English translation document, please add the section heading at page 1 line 22, as follows:

--SUMMARY OF INVENTION--

In the English translation document, please amend the paragraph at page 5 lines 5-6, as follows:

This object is achieved by the claims an AAA server system in accordance with claim 1 and a method in accordance with claim 10.

In the English translation document, please amend the paragraph at page 5 lines 8-31, as follows:

The AAA server system in accordance with the invention incorporates numerous AAA servers for the administration of at least one pool of logical addresses. Here, each of several disjoint subsets or subpools, as applicable, of at least one address pool is assigned to exactly one AAA server. Only the AAA server to which they belong can assign the logical addresses in each of the subsets of the address pool to a terminal device or subscriber, and they are administered by that AAA server (claim-1). It is also possible for a number of subsets of an address pool to be assigned to one AAA server. The address pools can be, for example, IP address ranges (claim 2). The assignment of addresses to terminal devices by the AAA servers in the AAA server system can be made, for example, with the help of the RADIUS (Remote Authentication Dial-In User Service) protocol (claim 3). These protocols are often used for communication between an AAA server system and an access server or NAS, with the help of which terminal devices can be connected to the network (e.g. Internet). The AAA servers of the AAA server system can, for example, communicate with each other using the Internet protocol or TCP/IP (Transmission Control Protocol/Internet Protocol) (claims 4 and 8). For the purpose of changing the assignment of subsets of logical addresses, or subpools of logical addresses, to AAA servers, it is logical if all the AAA servers of the server system have available the entire pool or entire pools of logical addresses, as applicable (claim 5).

In the English translation document, please amend the paragraph at page 6 line 6 to page 7 line 27, as follows:

With the method in accordance with the invention for the updating of information in an AAA server system in accordance with the invention, a first AAA server in the server system sends an updating message regularly to all the other servers in the AAA server system. This updating message comprises information about changes in the status of subsets of the address pool or address pools assigned to the first AAA server, which have occurred since the previous available update. The regular sending, for example at fixed intervals of time, of

updating messages from the AAA server to all the other AAA servers in the AAA server system enables the issuing of logical addresses by the individual AAA servers in the AAA server system to be coordinated. In this way, the subsets of the address pool or address pools which are in use can be signaled to all the AAA servers. In addition, information can be exchanged between the AAA servers about the logical address resources which will be required during the coming time interval. This involves an AAA server, before sending its updating message, in estimating the number of logical addresses to be issued in the time period between the updating message which is being sent and the next-following updating message. This can be done by forming the product of the maximum rate at which the AAA server can process requests for the issue of a logical address and the time period between the updating message which is being sent and the next-following updating message (claim 12). The estimate thus obtained provides an upper limit for the number of addresses which will be required. From the subsets of the address pool which are assigned to the server, some are selected from which to take the logical addresses which will, according to the estimate, be required in the time period. The updating message can then contain information about which of the subsets of the address pool, assigned to the AAA server, have been selected from which to take the logical addresses which, according to the estimate, will be required in the time period (claim 11). In this way, subsets of logical addresses can be marked as "uncertain", i.e. it is possible that logical addresses may be issued from these subsets within the next time period. This marking comes into play if individual AAA servers require additional subsets of the address pool in order to satisfy connection requests. In such a case, the responsibility for or assignment of subsets of the address pool which are not marked as "uncertain" can be changed, and assigned to the AAA server which has a shortage of logical addresses (claim 13). With this method, the individual AAA servers communicate a mixture of redundant data and blocking information (marked subsets of the address pool, the assignment of which may not be reallocated). This limits the volume of data which must be exchanged between the servers. As a general rule, individual servers will not be able to see which individual addresses have been issued by other AAA servers. This reduces the status information which must be stored on the individual computers – for other AAA servers, status details will be maintained for the subsets (possibly indexed) rather than for the individual addresses – and the data transmission rate for the information exchange between the servers is reduced.

In the English translation document, please amend the paragraph at page 8 lines 1-21, as follows:

If an AAA server should fail, the subsets of the address pool which are assigned to this AAA server can be assigned to another AAA server, e.g. in accordance with the stipulations of a priority list (claims 14 and 15). The subsets for the AAA server which has failed may if necessary also be distributed between several other AAA servers. It is then logical that those subsets of logical addresses which were marked as "uncertain" in the last updating message received from the server which has failed should for a certain period of time remain unused when making a new issue of logical addresses (claim 16). This period of time could, for example, correspond to the maximum permitted connection time (claim 17). Updating messages can also be used when rebooting AAA servers in the AAA server system. For example, a rebooted AAA server would send a multicasting message to the other AAA servers, in which it requests the sending of updating messages and the assignment of subsets of the address pool (claim 18). In communicating the updating message, the TCP/IP protocol, the RADIUS protocol or the DIAMETER protocol could be used as the transport protocol. As a result of the reduction in the volume of messages exchanged, it is possible that the individual servers of the server system could be installed at different places, i.e. locally (claim 9).

In the English translation document, please amend the paragraph at page 8 lines 23-24, as follows:

Further advantageous developments of the subject of this invention are specified in the <u>dependent other sub</u>claims.

In the English translation document, please add the section heading at page 8 line 28, as follows:

--BRIEF DESCRIPTION OF THE DRAWINGS--

In the English translation document, please add the section heading at page 9 line 12, as follows:

-- DETAILED DESCRIPTION OF INVENTION--